

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Attorney Docket No. 9869

Application of:

Kevin W. Haulk et al.

Art Unit: 3627

Serial No.: 10/044,021

Examiner: R. Laneau

Filed: January 11, 2002

For: **METHODS AND APPARATUS FOR PERFORMING DELTA  
UPDATES OF AN ELECTRONIC SHELF LABEL**

MS Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**OCT - 5 2006**

**APPEAL BRIEF**

Sir:

Appellants have filed a timely Notice of Appeal from the action of the Examiner, dated March 9, 2006, finally rejecting all of the claims in the present application. This is a replacement Appeal Brief, responding to the Notice of September 22, 2006.

**(i) REAL PARTY IN INTEREST**

The real party in interest is NCR Corporation.

**(ii) RELATED APPEALS AND INTERFERENCES**

There are no related appeals and interferences.

**(iii) STATUS OF THE CLAIMS**

Claims 13-23 are pending in the application.

Claims 13-23 stand rejected under 35 USC 102(b) as anticipated by Brick (6,269,342).

Claims 13-23 are appealed.

Claims 1-12 are canceled. There are no other claims, e.g., allowed, withdrawn, or objected to in the application.

**(iv) STATUS OF AMENDMENTS**

Appellants did not file a Response subsequent to the Final Rejection.

**(v) SUMMARY OF CLAIMED SUBJECT MATTER**

Claims 13-18 relate to a computerized method of performing a delta update of an electronic shelf label.

As embodied in claim 13, the invention includes

(a) comparing a first data image including a first table of a plurality of registers of said ESL and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents (Page 11, lines 22-23; page 12, lines 1-4, 18: Fig. 5); and

(b) scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents (page 12, lines 21-23; page 13, lines 1-3; Fig. 5).

As embodied in claim 14, the invention further includes

(c) receiving an indication that an update to one or more of said registers may be necessary prior to step (a)

(page 12, lines 12-14; Fig. 5).

As embodied in claim 15, the invention further includes  
(c) reading the first data image from a source of  
current ESL data (page 12, line 17; Fig. 5).

As embodied in claim 16, the invention further includes  
(c) reading the second data image from a source of  
product data (page 12, line 14; Fig. 5).

As embodied in claim 17, the invention further includes  
(c) creating a third data image including a third table  
with only said number of registers and the corresponding  
planned contents prior to step (b) (page 12, lines 21-23;  
page 13, lines 1-3; Fig. 5).

As embodied in claim 18, the invention includes  
(a) receiving an indication to perform an update of a  
plurality of registers of said ESL by an ESL manager program  
(page 12, lines 12-14; Fig. 5);

(b) reading a first data image including a first table  
of said registers and current contents of said registers  
from current ESL data by the ESL manager program;

(c) obtaining a second data image including a second  
table of said registers and planned contents of said  
registers from product data using a data reader program by  
the ESL manager program (page 12, line 17; Fig. 5);

(d) comparing the first data image with the second data  
image to determine a number of said registers less than all  
of said registers whose planned contents are different than  
corresponding current contents by the ESL manager program  
(Page 11, lines 22-23; page 12, lines 1-4, 18; Fig. 5);

(e) creating a third data image including a third table

with only said number of registers and the corresponding planned contents by the ESL manager program (page 12, lines 21-23; page 13, lines 1-3; Fig. 5); and

(f) sending the third data image to a CBS manager program for transmission to the ESL by the ESL manager program (page 12, lines 21-23; page 13, lines 1-3; Fig. 5).

Claims 19-23 relate to an electronic shelf label system.

As embodied in claim 19, the invention includes an ESL including a plurality of registers and a display for displaying information (page 7, lines 11-12; Fig. 2); and

a host computer for comparing a first data image including a first table of said registers and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents (Page 11, lines 22-23; page 12, lines 1-4, 18; Fig. 5), and for scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents (page 12, lines 21-23; page 13, lines 1-3; Fig. 5).

As embodied in claim 20, the invention further includes wherein the computer is also for receiving an indication that an update to one or more of said registers may be necessary (page 12, lines 12-14; Fig. 5).

As embodied in claim 21, the invention further includes

wherein the computer is also for reading the first data image from current ESL data (page 12, line 17: Fig. 5).

As embodied in claim 22, the invention further includes wherein the computer is also for reading the second data image from product data (page 12, line 14; Fig. 5).

As embodied in claim 23, the invention further includes wherein the computer is also for creating a third data image including a third table with only said number of registers and the corresponding planned contents, and for scheduling transmission of the third data image as part of the message (page 12, lines 21-23; page 13, lines 1-3; Fig. 5).

**(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether Claims 13-23 are anticipated under 35 USC 102(b) as anticipated by Brick (6,269,342).

**(vii) ARGUMENT**

Brick discloses an electronic shelf label system including a means for updating price information displayed by electronic shelf labels. In a first embodiment, a host computer sends updated prices to a hand-held terminal. The hand-held terminal includes a barcode reader wand which it uses to program the electronic shelf labels with the updated prices. In a second embodiment, the host sends messages to the electronic shelf labels containing updated prices. The electronic shelf labels compare address information in messages to address information in their memories to accept or reject the updated price information in the messages.

THE REJECTION OF CLAIMS 13-23 UNDER 35 U.S.C. §102(b) IS  
IMPROPER BECAUSE CRAGUN FAILS TO TEACH EACH AND EVERY  
ELEMENT OF APPELLANTS' CLAIMS.

To establish anticipation, the Office has the burden of showing that the reference teaches each and every element of a claim (MPEP §2131).

With respect to claims 13-17, Brick fails to disclose.

(a) comparing a first data image including a first table of a plurality of registers of said ESL and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents; and

(b) scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents.

Brick discloses comparing message addresses with ESL addresses, not comparing current memory contents with planned memory contents.

With respect to claim 14, Brick fails to disclose

(c) receiving an indication that an update to one or more of said registers may be necessary prior to step (a).

Brick fails to disclose memory registers or that the memory registers contain information.

With respect to claim 15, Brick fails to disclose

(c) reading the first data image from a source of current ESL data.

Brick discloses an ESL database, but fails to disclose reading a first data image from the ESL database.

With respect to claim 16, Brick fails to disclose  
(c) reading the second data image from a source of product data.

Brick discloses a product database, but fails to disclose reading a second data image from the product database.

With respect to claim 17, Brick fails to disclose  
(c) creating a third data image including a third table with only said number of registers and the corresponding planned contents prior to step (b).

Brick fails to disclose creating of data images including tables identifying memory registers and contents of memory registers. Brick fails to disclose memory registers.

With respect to claim 18, Brick fails to disclose  
(a) receiving an indication to perform an update of a plurality of registers of said ESL by an ESL manager program;

(b) reading a first data image including a first table of said registers and current contents of said registers from current ESL data by the ESL manager program;

(c) obtaining a second data image including a second table of said registers and planned contents of said

registers from product data using a data reader program by the ESL manager program;

(d) comparing the first data image with the second data image to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents by the ESL manager program;

(e) creating a third data image including a third table with only said number of registers and the corresponding planned contents by the ESL manager program; and

(f) sending the third data image to a CBS manager program for transmission to the ESL by the ESL manager program.

Brick fails to disclose memory registers or that the memory registers contain information. Brick discloses comparing message addresses with ESL addresses, not comparing current memory contents with planned memory contents. Brick discloses an ESL database, but fails to disclose reading a first data image from the ESL database. Brick discloses a product database, but fails to disclose reading a second data image from the product database. Brick fails to disclose creating of data images including tables identifying memory registers and contents of memory registers.

19. An electronic shelf label (ESL) system comprising:

an ESL including a plurality of registers and a display for displaying information; and

a host computer for comparing a first data image including a first table of said registers and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said



registers less than all of said registers whose planned contents are different than corresponding current contents, and for scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents.

Brick fails to disclose memory registers or that the memory registers contain information. Brick discloses comparing message addresses with ESL addresses, not comparing current memory contents with planned memory contents.

20. The system of claim 19, wherein the computer is also for receiving an indication that an update to one or more of said registers may be necessary.

Brick fails to disclose memory registers or that the memory registers contain information.

21. The system of claim 19, wherein the computer is also for reading the first data image from current ESL data.

Brick discloses an ESL database, but fails to disclose reading a first data image from the ESL database.

22. The system of claim 19, wherein the computer is also for reading the second data image from product data.

Brick discloses a product database, but fails to disclose reading a second data image from the product database.

23. The system of claim 19, wherein the computer is also

for creating a third data image including a third table with only said number of registers and the corresponding planned contents, and for scheduling transmission of the third data image as part of the message.

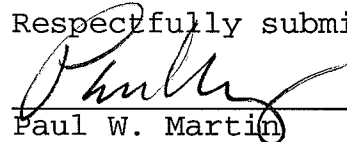
Brick fails to disclose creating of data images including tables identifying memory registers and contents of memory registers.

### **CONCLUSION**

Appellants respectfully submit that the Examiner has failed to establish anticipation and that the rejection of claims 13-23 is improper.

Appellants further submit that claims 13-23 are allowable and respectfully request that the rejection of claims 13-23 by the Examiner be reversed by the Board.

Respectfully submitted,



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**(viii) CLAIMS APPENDIX**

13. A computerized method of performing a delta update of an electronic shelf label (ESL) comprising:

(a) comparing a first data image including a first table of a plurality of registers of said ESL and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents; and

(b) scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents.

14. The method of claim 13 further comprising:

(c) receiving an indication that an update to one or more of said registers may be necessary prior to step (a).

15. The method of claim 13, further comprising:

(c) reading the first data image from a source of current ESL data.

16. The method of claim 13, further comprising:

(c) reading the second data image from a source of product data.

17. The method of claim 13 further comprising:

(c) creating a third data image including a third table with only said number of registers and the corresponding planned contents prior to step (b).

18. A computerized method of performing a delta update of an electronic shelf label (ESL) comprising:

(a) receiving an indication to perform an update of a plurality of registers of said ESL by an ESL manager program;

(b) reading a first data image including a first table of said registers and current contents of said registers from current ESL data by the ESL manager program;

(c) obtaining a second data image including a second table of said registers and planned contents of said registers from product data using a data reader program by the ESL manager program;

(d) comparing the first data image with the second data image to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents by the ESL manager program;

(e) creating a third data image including a third table with only said number of registers and the corresponding planned contents by the ESL manager program; and

(f) sending the third data image to a CBS manager program for transmission to the ESL by the ESL manager program.

19. An electronic shelf label (ESL) system comprising:

an ESL including a plurality of registers and a display for displaying information; and

a host computer for comparing a first data image including a first table of said registers and current contents of said registers with a second data image including a second table of said registers and planned contents of said registers to determine a number of said registers less than all of said registers whose planned contents are different than corresponding current contents,

and for scheduling a message for transmission to the ESL updating only the number of said registers to include corresponding planned contents.

20. The system of claim 19, wherein the computer is also for receiving an indication that an update to one or more of said registers may be necessary.

21. The system of claim 19, wherein the computer is also for reading the first data image from current ESL data.

22. The system of claim 19, wherein the computer is also for reading the second data image from product data.

23. The system of claim 19, wherein the computer is also for creating a third data image including a third table with only said number of registers and the corresponding planned contents, and for scheduling transmission of the third data image as part of the message.

**(ix) EVIDENCE APPENDIX**

No evidence pursuant to §§1.130, 1.131, or 1.132 or any other evidence has been entered by the Examiner or relied upon by Appellant.

**(x) RELATED PROCEEDINGS APPENDIX**

There are no related decisions rendered by a court or the Board or copies of such decisions.